



Monthly Drought Update
August 11, 2015
San Luis Obispo County

Note: Information provided in this update varies by date.

CURRENT CONDITIONS

U.S. Drought Monitor Status:

The latest U.S. Drought Monitor report released July 30, 2015, indicates San Luis Obispo County remains at the **D4 – Exceptional Drought intensity rating**. Approximately 95% of the state remains at a level D2 – Severe Drought or worse with 46% of the state in a D4 – Exceptional Drought intensity rating.

San Luis Obispo County Precipitation Totals (in inches):

Sub-Region	Area / Rain Station	Average Annual Rainfall	2014-15 Water Year (July 2014-June 2015)	
			Cumulative Total	% of Total Average
North Coast	Cambria (ALERT #717)	22.0	1.38	6%
	Whale Rock Reservoir (County Site #166.1)	16.0	1.10	7%
Inland	Paso Robles (County Site #10.0)	14.1	2.82	20%
	NE Atascadero (ALERT #711)	17.0	0.83	5%
	Atascadero MWC (County Site #34.0)	17.5	1.28	7%
	Santa Margarita (ALERT #723)	24.0	0.79	3%
	Salinas Dam (County Site #94)	20.9	1.06	5%
South Coast	SLO Reservoir (ALERT #749)	24.0	1.26	5%
	Lopez Recreation Area (ALERT #707)	23.0	1.09	5%
	West of Nipomo (CIMIS #202)	14.8	1.07	7%
	Nipomo East (ALERT #728)	18.0	0.98	5%

Notes: This table contains provisional data from automated gauges and has not been verified. All units reported in inches. Report generated at 11:00am on 7/29/2015.

Near-term Outlook for Precipitation:

The remnants of Hurricane Delores produced record rainfall in many areas in Southern California including 1 - 2 inches of rain in San Luis Obispo County during the weekend of July 18-19. Since August through October is a dry time of year long-term hydrological drought is likely to continue. There is a greater than 90 percent chance El Niño will continue through Northern Hemisphere winter 2015-16, and around an 80 percent chance it will last into early spring 2016, according to an advisory released by the National Weather Service Climate Prediction Center. However, long-term hydrological drought is likely to continue. The U.S. Seasonal Drought Outlook is calling for the drought to persist or intensify throughout California and most of the far western U.S.

Reservoir Levels (% of capacity):

Reservoir	% of Capacity	Current Acre Feet Storage
Nacimiento	24%	90,313
Whale Rock	40%	15,655
Lopez	35%	17,259
Salinas	14%	3,448

Source: www.slocountywater.org County of San Luis Obispo

STATE WATER

Status: The Department of Water Resources (DWR) announced expected water deliveries in 2015 to most customers of the State Water Project (SWP) to 20% of their requested amounts. San Luis Reservoir is currently at 27% capacity (53% of average).

Actions: The Public Works Department has released a 2015 projected delivery schedule and met with sub-contractors to discuss 2015 projected deliveries. Staff has distributed information to subcontractors showing the 20% delivery scenario and will continue to coordinate with sub-contractors as more information arises.

VULNERABLE WATER SYSTEMS**County Service Areas (CSA's):****Santa Margarita (CSA 23)**

- Drought response level remains at ALERT status.
- Primary pumping is from shallow well No. 4; water is also being pumped from deep well No. 3 to reduce needs from well No. 4. State officials have also authorized the use of shallow wells 1 & 2 should the need arise.
- An emergency ordinance was adopted limiting outdoor watering. An informational mailer was sent to customers and signs in the community have been installed.
- Staff is monitoring conditions for a potential status change to CRITICAL.
- The intertie with Atascadero Mutual Water Company (AMWC) has issued a notice to proceed, with work starting soon.

Shandon (CSA 16)

- Two wells currently provide all water to the Shandon community and continued to be monitored.
- Connection to the State Water Project is pending the Central Coast Water Authority approval.
- An emergency ordinance was adopted limiting outdoor watering. An informational mailer was sent to customers and signs in the community have been installed.

Cayucos (CSA 10A)

- Supply is available from Whale Rock and one on-site well. Staff has given a presentation to the Advisory Committee and business groups regarding conserving this supply.
- An emergency ordinance was adopted limiting outdoor watering. An informational mailer was sent to customers and signs in the community have been installed.

Avila Valley (CSA 12)

- Adequate supply is available from Lopez and State water "carryover" water sources for this year and next.

Chorro Valley Institutions (CMC, Animal Services, Sheriff, County Operations, Camp San Luis, Cuesta College, County Office of Education):

- 2015 State water carryover water is available and being provided.
- The existing distribution system is being evaluated to assure water losses are minimized.
- CMC is at 100% design of their water treatment plant upgrade project and will soon go out to bid.
- Discussions with City of San Luis Obispo to exchange Nacimiento for Whale Rock are being initiated if State Water is insufficient in 2016.

Non-County Operated:

- **Cambria Community Services District**

Status: Emergency San Simeon Creek Brackish Water Supply Project went online on January 20, 2015. The district is now seeking a permit to operate it permanently.

- **San Simeon Community Services District**

Status: The CSD has a new well head salinity project to increase supplies in the current prop 84 grant round.

- **Heritage Ranch Community Services District**

Status: The Nacimiento River is the only available water source for the community of Heritage Ranch. An emergency inter-tie will be funded with emergency grant funds and construction on the inter-tie is underway.

- **Rural Paso Robles residents**

Status: Continuing to identify water-trucking options and examine outreach efforts. See County Drought Conditions and Water Conservation Website for drought relief update information.

IMPACTS

Agricultural Impacts:

Staff from the county Department of Agriculture/Weights and Measures and the University of California Cooperative Extension collaborates to monitor the effect of drought conditions to agricultural operations. The following is a summary of comments and observations from local University of California Cooperative Extension Farm Advisors, Department of Agriculture staff and agricultural producers.

The recent rains of July 18-19 were a welcomed sight for many agriculturalists. However, amounts were variable and inconsistent throughout the county. Generally, growers that received substantial rain appreciated the break in irrigation schedules. The high temperatures and high humidity leading up to the rain event was of concern to berry and vegetable growers because of the potential for mildew damage. Early reports indicate the cooler, breezy weather that returned shortly after the rain helped mitigate the conditions more favorable to mildew and plant diseases.

The timing of the rain was favorable for native oak trees and other native vegetation. Oak trees showing visible signs of stress from lack of moisture benefitted from the rain.

Cattle ranchers continue to report the need to haul water to fill water troughs in compensation for the lack of natural springs or dry wells that normally provide water for livestock. The July rain did not improve rangeland conditions.

Salt accumulation in the root-zone continues to be a concern for vegetable, berry, grape and tree crop producers. The July rain was not enough to leach roots adequately. Avocado growers continue to severely prune or stump trees. Those that have not stumped are irrigating in smaller blocks to reduce water pumping.

Agricultural Assistance - Update from the USDA Farm Service Agency

According to staff at the USDA Farm Service Agency, the following programs are active in providing assistance. The programs are briefly summarized as follows:

LFP – Livestock Forage Disaster Program: provides payments for grazing losses. Because San Luis Obispo County continues in the D4 drought category, current eligibility is for 5 months of payments. Deadline to file is January 30, 2016 for 2015 payments.

ELAP – Emergency Assistance for Livestock, Honeybees and Farm-Raised Fish Program: provides relief to producers who haul water to livestock. Deadline to file is September 1, 2015.

EQIP – Environmental Quality Incentives Program (NRCS): provides funds for land conservation planning and implementation of conservation practices. This program provides cost-share funding through USDA – NRCS. Applications and approvals are ongoing.

NAP – Non-insured Crop Disaster Assistance Program: provides cash payments to producers of noninsurable crops when low yields, loss of inventory, or planting did not occur due to natural disasters. Producers who are insured through this program should file a notice of loss as soon as possible and are required to file within 15 days of the loss being apparent to be eligible for benefits.

Tree Assistance Program – covering Red Blotch Disease in vineyards and losses due to drought conditions if growers rehabilitate or replant orchards.

For information about the assistance programs, contact the USDA Farm Service Agency:

Templeton: (805) 434-0398 Ext 2.

Santa Maria: (805) 928-9269

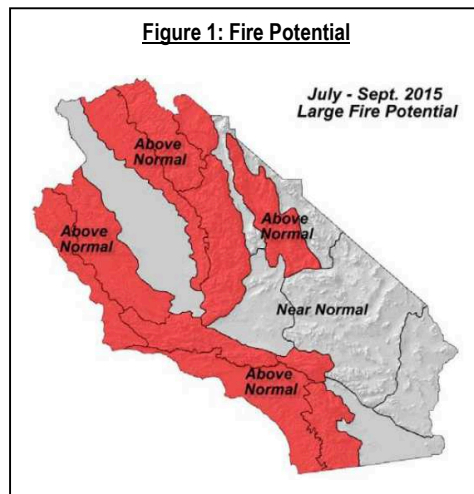
Fire Danger:

Fire Danger

In 2015, CAL FIRE has responded to over **3,625** fires across the State, burning **18,874** acres in State Responsibility Area. This level of fire activity is comparable to the five year average of 2,386 fires and 32,935 acres burned. The reduction in acres can be attributed to additional staffing and cool, damp weather patterns through spring that allowed the high number of starts to be contained quickly. These statistics do not include fires on Federal jurisdiction.

In San Luis Obispo County in 2015, through June, CAL FIRE responded to **85** wildfires, which burned **1,841** acres. Since 2007, the average for this period is 83 wildfires burning 441 acres. The Deer Fire ignited on Friday, July 10 and burned 95 acres in brush and oak woodland. The fire originated near Running Deer Ranch and was caused by activities at a marijuana grow site.

Figure 1 to the right indicates above normal fire potential in the county for the coming months.



Equipment/Staffing:

Locally, CAL FIRE is fully staffed, including 12 wildland engines, and 24/7 staffing of hand crews and dozers. Paso Robles Air Attack Base has increased staffing to include three tankers and one air attack. Defensible Space Inspectors (DSI) conducted over 2,000 focused inspections in Cambria including handing out fire prevention education materials door-to-door. A portable Remote Automatic Weather Station (RAWS) was deployed in Cambria to augment fire weather monitoring capabilities on the north coast.

The annual backyard burn season ended on April 13. A Countywide Burn Ban was proclaimed on June 19, 2015. The burn ban eliminates all burning within CAL FIRE jurisdiction except for campfires at approved campgrounds.

Live Fuel Moisture (LFM)

(LFM is the moisture content of live vegetation expressed as a percentage of the oven-dry weight.)

LFM values in the County peaked much earlier than usual in 2015 and are continuing to trend downward with values below historic lows and approaching the critical level of 60. LFM values area-wide will likely reach critical (60%) levels 2 -3 months earlier than normal.

Overall, frequent dry weather patterns and the presence of low live and dead fuel moistures have produced fuel conditions that are considered available for burning. The daily decrease in LFM causes a corresponding increase in the fire danger. This has been moderated some by the cool weather patterns, but it is likely that hot weather will produce explosive burning conditions into fall. The grass is now fully cured and compared to 2014 is much more dense due to good growth resulting from timely rain events in February and April. This abundant grass crop throughout much of the County could result in greater fire spread, particularly from roadside starts.

Dead Fuel Moisture

(The moisture content of dead organic fuels is another important component of the relative fire danger. As with LFM above, dead fuel moisture levels are a good indicator of how likely fuels are to ignite and how intensely they will burn. 100-hr fuel refers to vegetation between 1 and 3 inches in diameter and

Attachment 1

1000-hr fuel is 3-6 inches. When the fuel moisture content is low, fires start easily and will spread rapidly.)

Due to the rainfall on June 18-19, dead fuel moisture values rose to near or above average.

Temperatures/Relative Humidity (RH)

(When combined with other factors influencing the fire environment such as wind, steep topography, and low fuel moisture levels, hot temperatures and low RH can significantly increase the fire danger by increasing fire initiation, spread rates, burning intensity, and difficulty of control.)

Longer days and warm and dry weather has steadily increased the fire danger and prompted an early start to the 2015 fire season.

Energy Release Component (ERC)

(ERC is an index related to how hot a fire could burn. It is directly related to the 24-hour, potential worst case, total available energy (BTUs) at the head of a fire. The ERC can serve as a good characterization of fire season as it tracks seasonal fire danger trends well. ERC has low variability, and is the best fire danger component for indicating the effects of intermediate to long-term drying on fire behavior.)

The record rainfall event from Delores has resulted in ERC values that have dropped to just above average. Warmer weather upcoming will likely cause ERC values to increase quickly as dead fuel moistures dry out.

Forest and Range Impacts

Widespread tree mortality is plainly evident throughout the County. All tree species have been adversely affected by the drought. Thousands of coast live oaks of all sizes in all areas and at all elevations have died. The ½ acre Bridge Fire in Cambria was caused by a lightning strike to a dead Monterey pine.

The area most severely impacted is the Cambria Monterey Pine Forest (CMPF). Already one of the most endangered native forests in the world, the CMPF has been further devastated by the drought. The poor condition of the CMPF resulting from the decades-long problems including senescence, over-crowding, fire exclusion, pitch canker, bark beetles, and many other fungal and parasitic pathogens has been severely amplified by the drought. These cumulative impacts have created the current situation where approximately 40-50% of the overstory trees are dead or dying. In certain areas, mortality exceeds 90%. In addition to the major impacts to forest health, the resulting fire hazard has increased to the point where catastrophic stand-replacing fire is very likely. Hundreds of large dead hazard trees are poised to fall on homes, vehicles, and vital infrastructure. Solutions are available including dead tree removal, biomass removal, cogeneration, thinning, prescribed burning, tree planting, and invasive weed control. Implementing worthwhile solutions is extraordinarily challenging and requires a community based effort involving multi-agency cooperation.

The County Planning and Building Department is working to provide relief from hazard tree permitting requirements in Cambria to facilitate tree removal on the high number of affected parcels. In addition, forest assessments have been initiated to quantify the extent of this issue and the results will be made known as soon as they become available. Approximately 50 plots have been completed to date.

Grants

The SLO Fire Safe Council (FSC) was awarded a grant by PG&E to assist with hazard tree abatement work in the County. The initial focus of this work will be in Cambria to mitigate hazard trees on Bridge Street and within the Fiscalini Ranch Preserve. This will further the work being completed by PG&E and by County Roads, which removed over 160 hazard trees in May.

Currently, \$42 million is available for Greenhouse Gas Reduction Fund (GGRF) grants. An additional \$90 million has been identified for GRRF grants in the Governor's budget for next fiscal year. On behalf of the community, the FSC is applying for funding through this program for substantial hazard abatement and forest health projects in Cambria.

Economic:

In an effort to coordinate local and state response to drought impacts the following surveys are being utilized by the County:

Drought Business Impact Survey

The San Luis Obispo County Workforce Investment Board (WIB) is gathering information on local drought-related job impacts. This is part of a statewide survey by the California Labor and Workforce Development Agency (LWDA) as part of an ongoing online survey to inform the Governor's Drought Relief Task Force of the drought's ripple effects. The WIB's Drought Business Impact survey is available at <http://sloworkforce.com/drought-survey/>. Local Workforce Investment Boards, workforce partners, and other local workforce entities are encouraged to complete the survey regularly to keep the Governor's Drought Relief Task Force up to date on the local area. The WIB is conducting outreach to chambers of commerce and other business services agencies for assistance in outreach to businesses and employers regarding the drought survey. Though the WIB is hearing that there are impacts, the county does not have any "reportable" impacts due to the State's requirements for reporting (i.e. specific business name, address, etc.).

Domestic Water Issues-Intake Form

The Governor's Drought Task Force created an online intake form for local, state, or tribal and federal agencies to document domestic water issues. The information is intended to inform and coordinate state response and mitigate drought impacts. Data collected is considered confidential and access is restricted. Individuals with domestic water issues are encouraged to contact County Environmental Health at (805) 781-5544.

STATE & FEDERAL KEY ACTION ITEMS FROM LAST MONTH

California Water Commission Approved Model Water Efficient Landscape Ordinance

On July 15, the California Water Commission adopted a revised model landscape ordinance prepared by the Department of Water Resources (DWR). The revised ordinance strengthens water efficiency requirements outside of new California homes by 30 percent. The revised model ordinance also increases water efficiency requirements for landscaping outside of commercial buildings by approximately 40 percent.

The ordinance requirements will take effect December 1, 2015 and apply to landscaping built or significantly modified to the point of requiring a local permit, plan check or design review. State law requires all land-use agencies to adopt a water-efficient landscape ordinance that is at least as efficient as the model ordinance prepared by DWR. DWR's model ordinance takes effect in those cities and counties that fail to adopt their own. Land-use agencies also will be required to report on ordinance adoption and enforcement each year.

COUNTY DROUGHT TASK FORCE KEY ACTION ITEMS FROM LAST MONTH

County Office of Emergency Services:

San Luis Obispo County OES continues to coordinate with the Governor's Office of Emergency Services (Cal OES) to provide updates on the drought situation, respond to specific information requests to Cal OES, and coordinate local emergency needs. In addition, County OES continues to gather local situation status information and drought costs throughout the county in order to send the information to Cal OES.

Emergency Food Aid

The California Department of Social Services (CDSS) has provided boxes of food to the Food Bank Coalition of San Luis Obispo for households impacted by the drought. Call the Food Bank for more information and to ensure Drought Food Assistance is still available: (805) 238-4664 or www.slofoodbank.org.

Emergency Actions:

No new emergency actions have been taken specific to the drought in this reporting period.

County Facilities Usage & Conservation Actions:

The county has taken the following actions:

- Fixture Replacement: To date, staff has retrofitted 44 buildings with low-flow fixtures, saving an estimated 4,500 gallons per week.

Attachment 1

- Leak Repair: Staff continues to identify and repair leaks to minimize water loss.
- Water Conservation: The Energy & Water Manager Services consultant contractor is coordinating with water purveyors to understand water reduction requirements for County facilities. Outreach and coordination will start with City of San Luis Obispo and Nipomo CSD, the purveyors with the most water accounts and usage for County Parks.
- Water Audit: The Energy & Water Manager Services consultant contractor provided a report showing high water use facilities. The next step will be to perform a water audit of high use facilities. The County received proposals for a water audit of the County Jail (top water using facility). The next step is to award task order for water audit.
- County Standards for Construction Contracts: Staff is reviewing and updating County standards for plumbing fixtures, to include more specific language for lower water usage fixtures in facility construction contracts and purchase orders.
- County Airport: As previously reported, County Airport fire hydrants must be flushed periodically to maintain safe water for drinking due to chlorine levels. The Airport is making the water from hydrant flushing available for agricultural operations, construction, or other purposes. Please contact the Airport at (805) 781-5205 if interested in using this free water.

Drought Contingency Planning:

The Public Health Department, the Public Works Department, and CAL FIRE/County Fire continue to develop plans to ensure there is adequate supply of water for firefighting and domestic water use in the event that a community does not have enough water. Water availability information from small and large public water systems has been categorized into three categories; Watch, Vulnerable, and Critical. The information has been placed into a GIS mapping layer for contingency planning.

County Public Outreach Actions:

Information regarding current and upcoming drought relief programs for rural homeowners has been placed on the County Drought Conditions and Water Conservation webpage. Rural Development, an agency of the United States Department of Agriculture (USDA), delivers a number of programs to help improve the quality of life in rural communities throughout the nation. These programs may also help rural communities, businesses and individuals impacted by California's ongoing drought conditions. For additional resources and information on applying for any of these programs, please visit <http://www.rurdev.usda.gov/ca> or the County Drought Conditions and Water Conservation webpage at http://www.slocounty.ca.gov/admin/Drought_Update.htm.

In an effort to raise awareness about water supply issues the County continues to examine multiple channels of communication for water conservation outreach efforts. Check out our water-saving tips, shareable water saving images, and customized Tweets and Facebook posts just for you to share and help us continue the SLO County culture of conservation at the following link: http://www.slocounty.ca.gov/admin/Drought_Update/water-conservation.htm

To report drought-related concerns or for water conservations questions, call the County Water Conservation and Drought Hotline at (805) 781-4466.

DROUGHT RELATED WEBSITES FOR MORE INFORMATION

County of San Luis Obispo Drought Conditions and Water Conservation
(http://www.slocounty.ca.gov/admin/Drought_Update.htm)

State's Water Conservation Campaign; Save our Water
(www.saveourh2o.org)

California's Drought Information Clearinghouse; Drought.CA.Gov
(<http://ca.gov/drought/>)

California Department of Food and Agriculture; Drought information
(www.cdfa.ca.gov/drought/)

California Department of Water Resources; Current Water Conditions
(www.water.ca.gov/waterconditions/drought/)

California State Water Resources Control Board; Water Rights, Drought Info and Actions
(www.swrcb.ca.gov/waterrights/water_issues/programs/drought/index.shtml)

California Department of Public Health; Drinking Water CDPH Drinking Water Program
(www.cdph.ca.gov/programs/pages/dwp.aspx)

USDA Disaster and Drought Assistance Information; USDA Programs
(http://www.usda.gov/wps/portal/usda/usdahome?navid=DISASTER_ASSISTANCE)

UC Cooperative Extension Drought Information Resources; Drought Information Resources
(http://cesanluisobispo.ucanr.edu/Drought_Information/)

